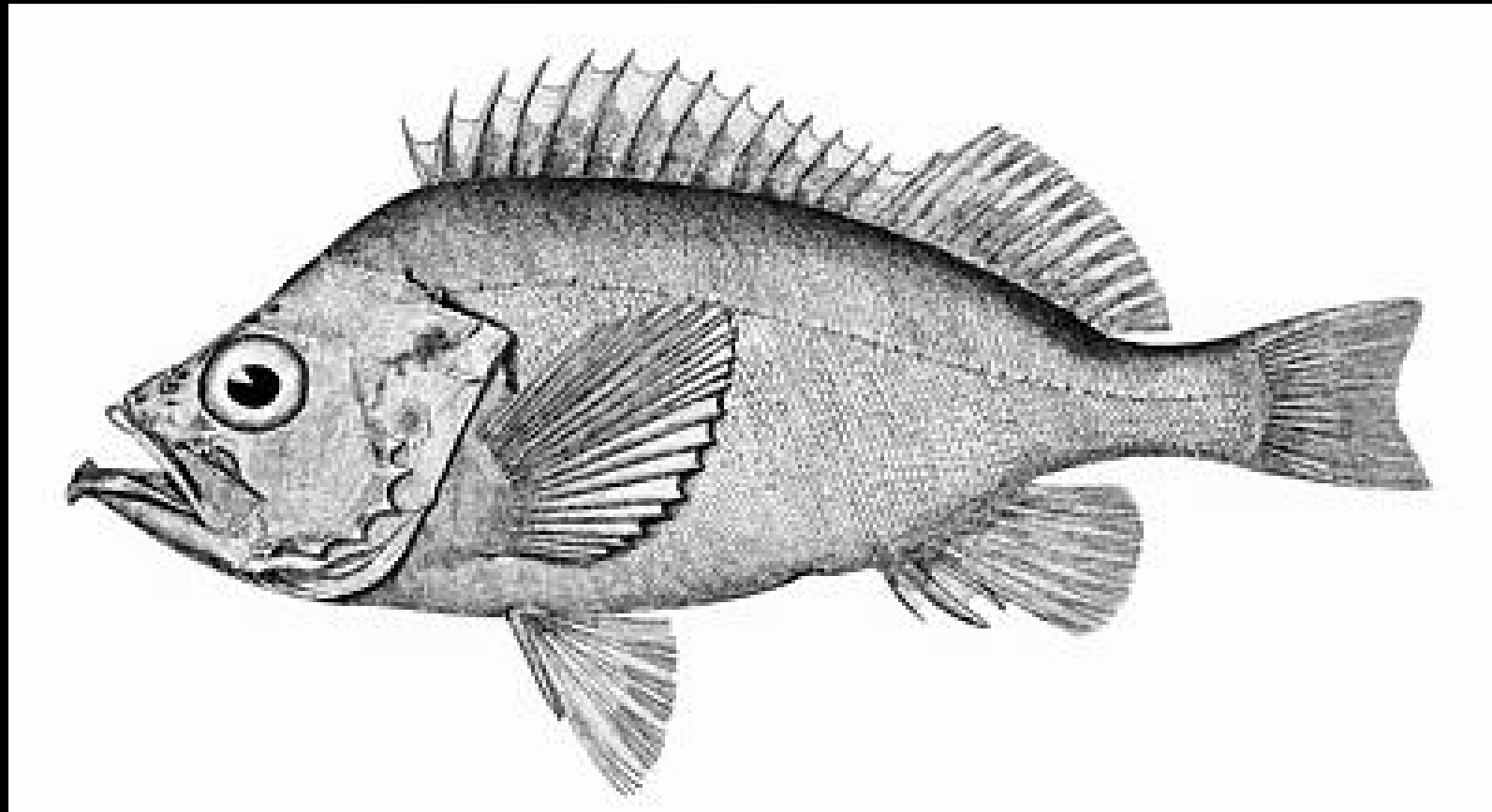
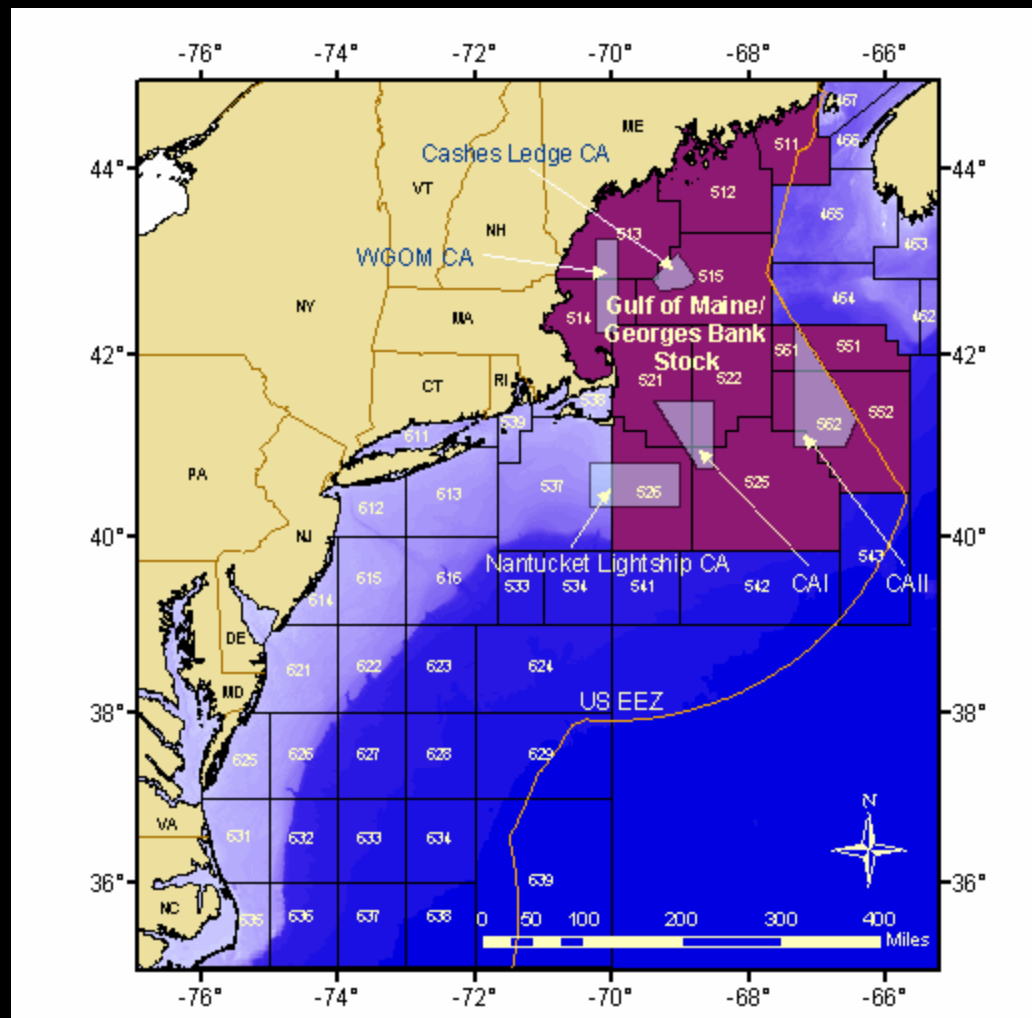


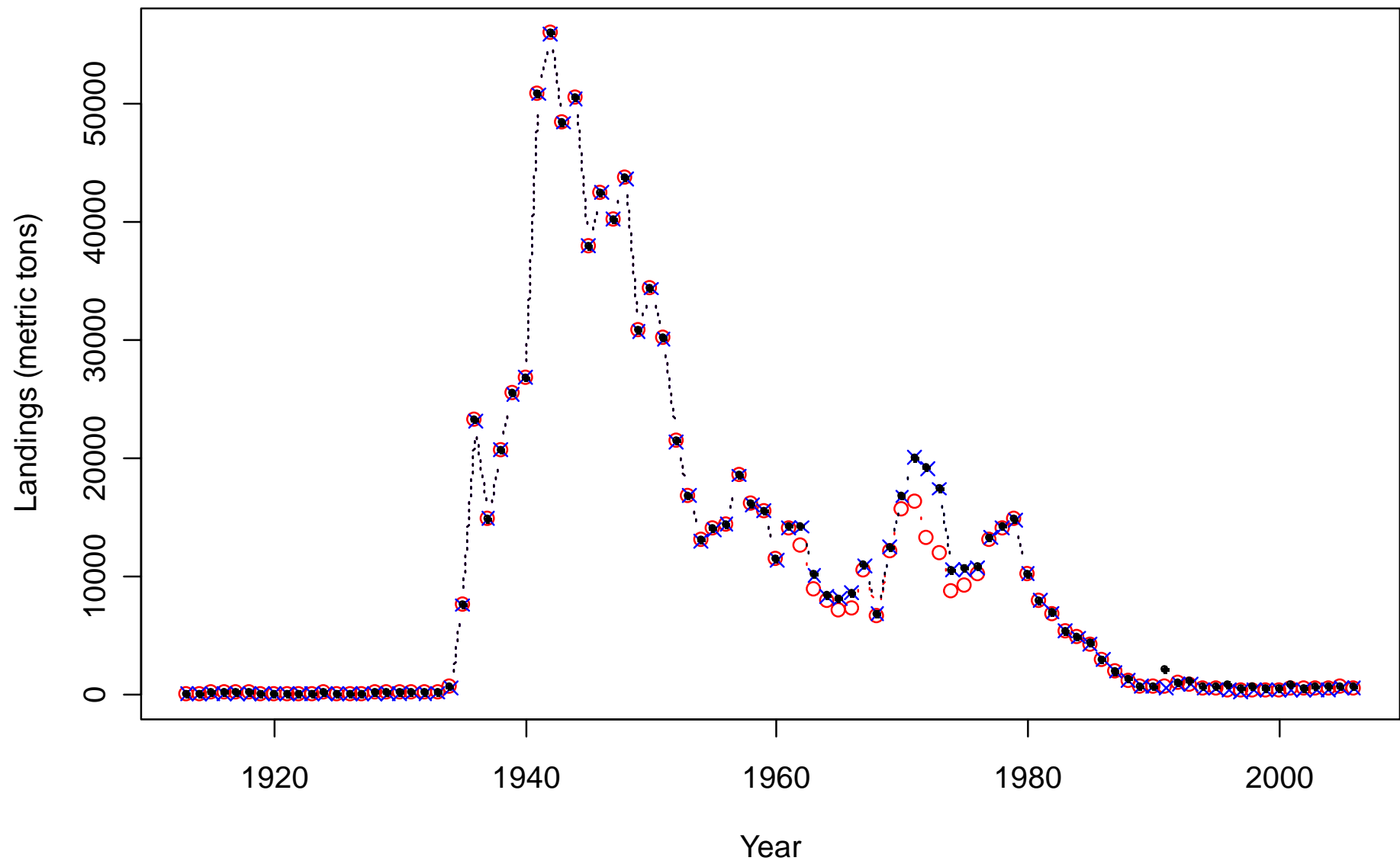
Gulf of Maine – Georges Bank Acadian Redfish

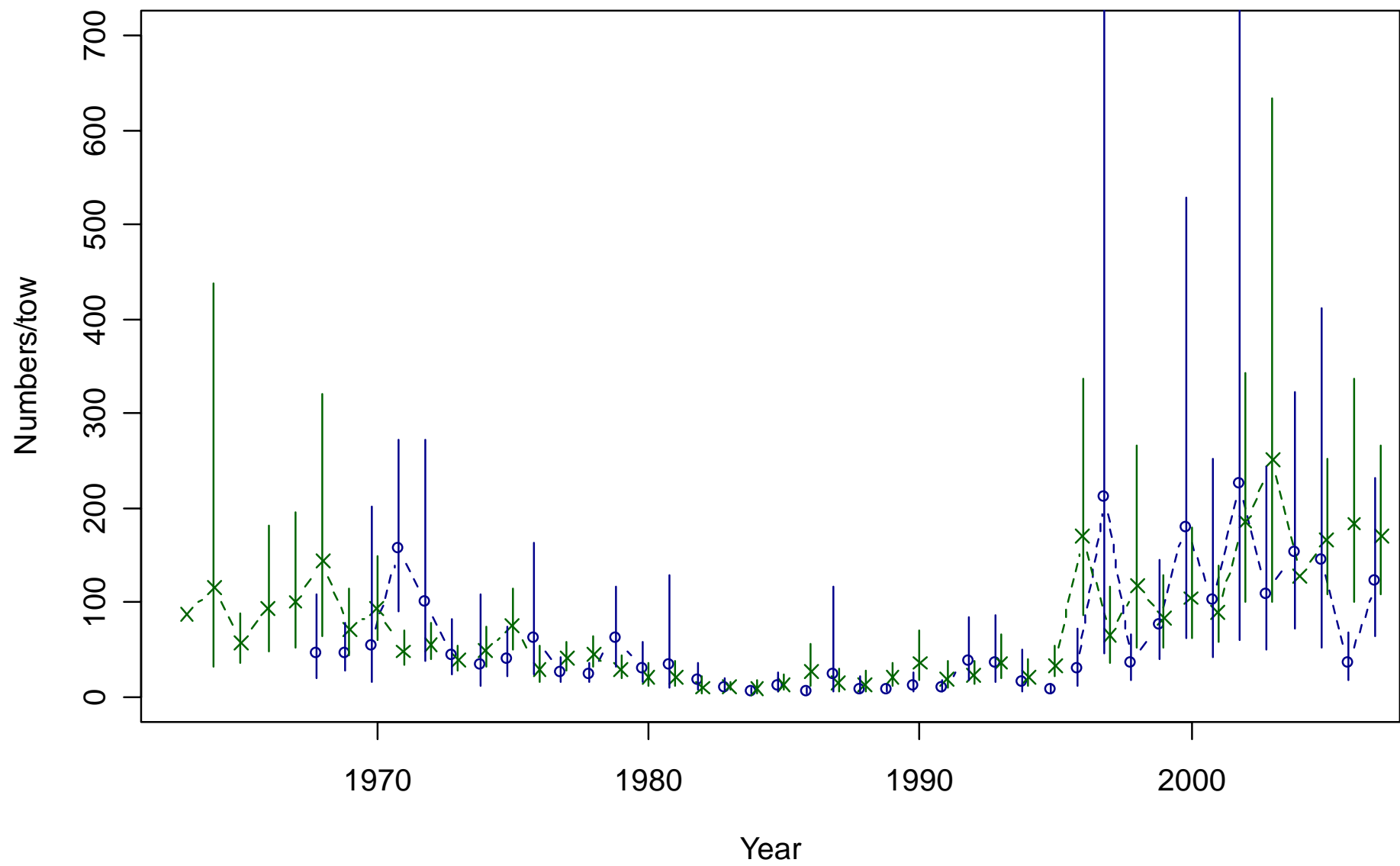
T. Miller, R. Mayo, J. Brodziak, M.
Travers and L. Col

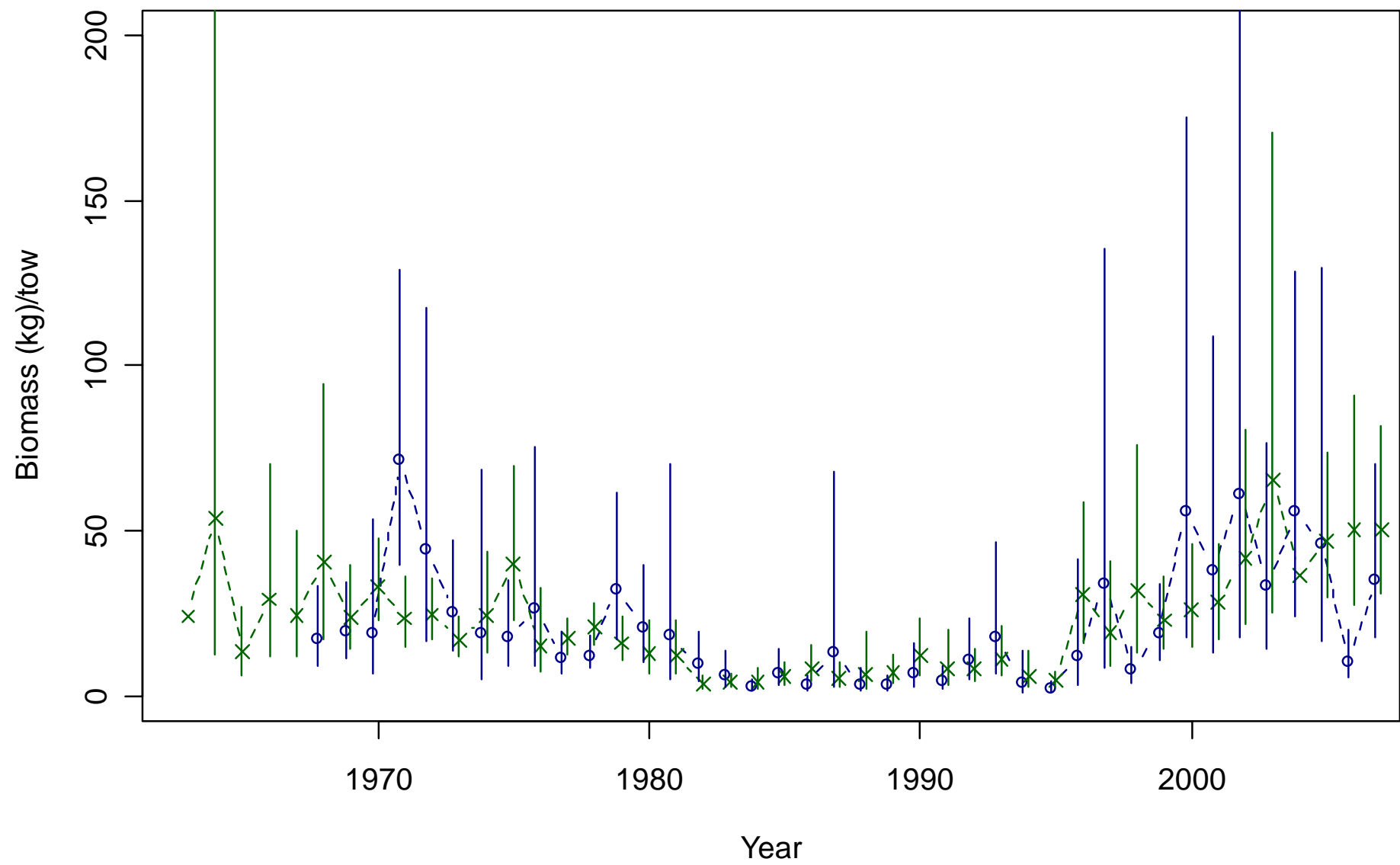
For the 2008 GARM assessment
methodology meeting











Current Redfish Status

- 2004 fishing mortality estimate was 0.002 (5% of F_{MSY}): not overfishing
- 2004 spawning biomass estimate was 176,000 mt (74% of SB_{MSY}): not overfished

Current Assessment Model

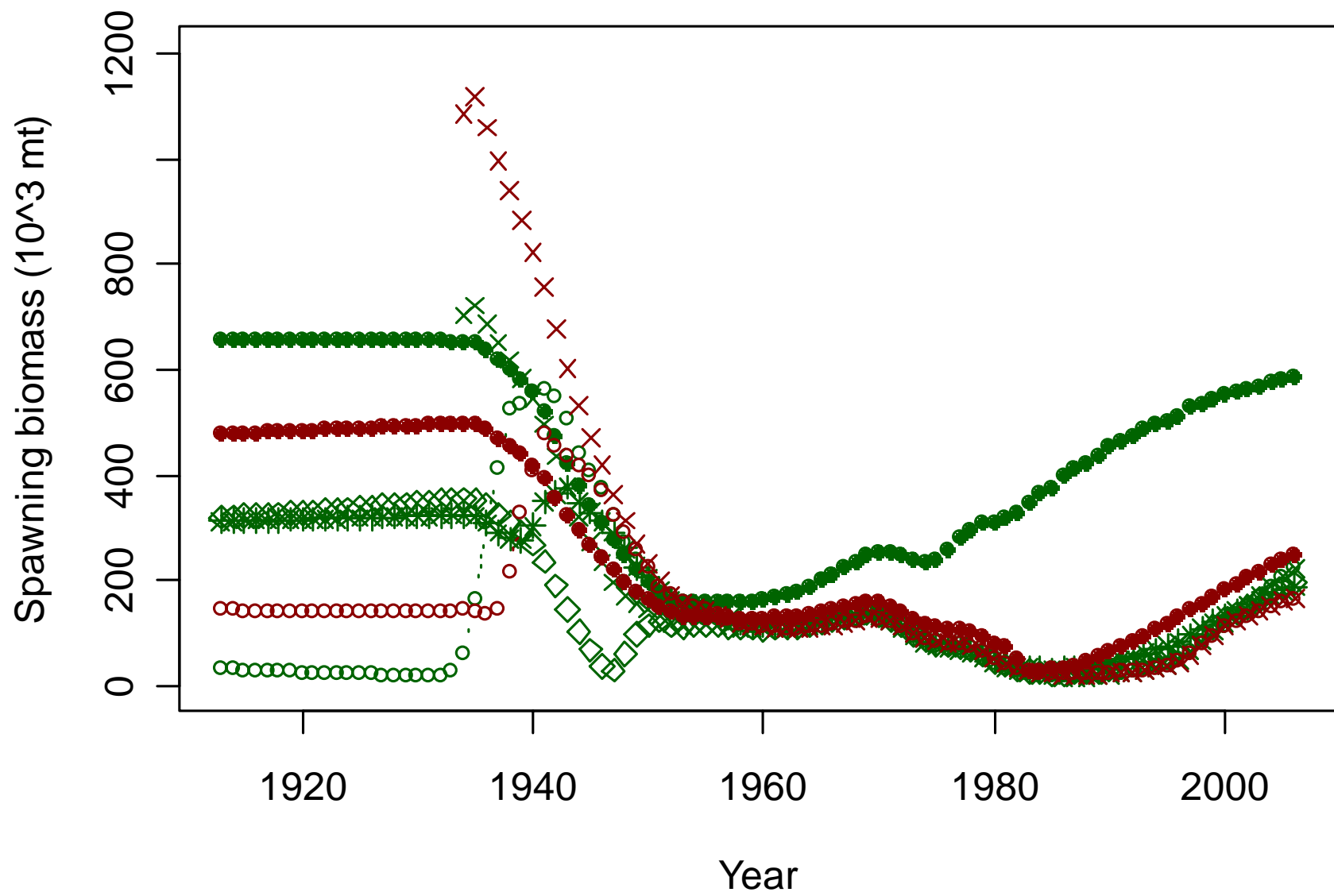
- A statistical catch-at-age model (RED)
- Prototype of the STATCAM model in the Toolbox
- Fits model to landings, fall and spring survey indices, proportions at age in surveys and landings and fishery CPUE.
- Employs a suite of “emphasis” factors on likelihood components

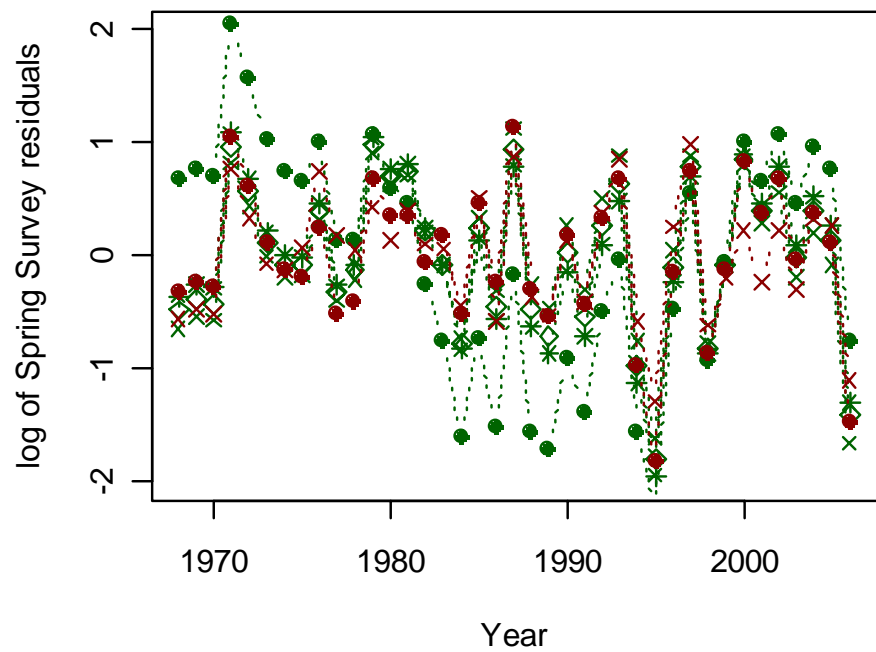
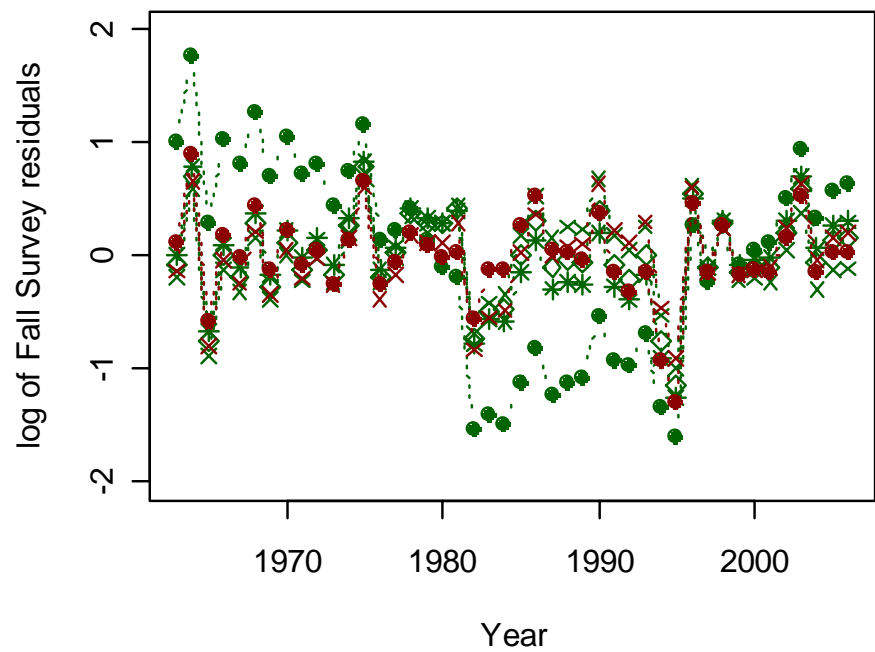
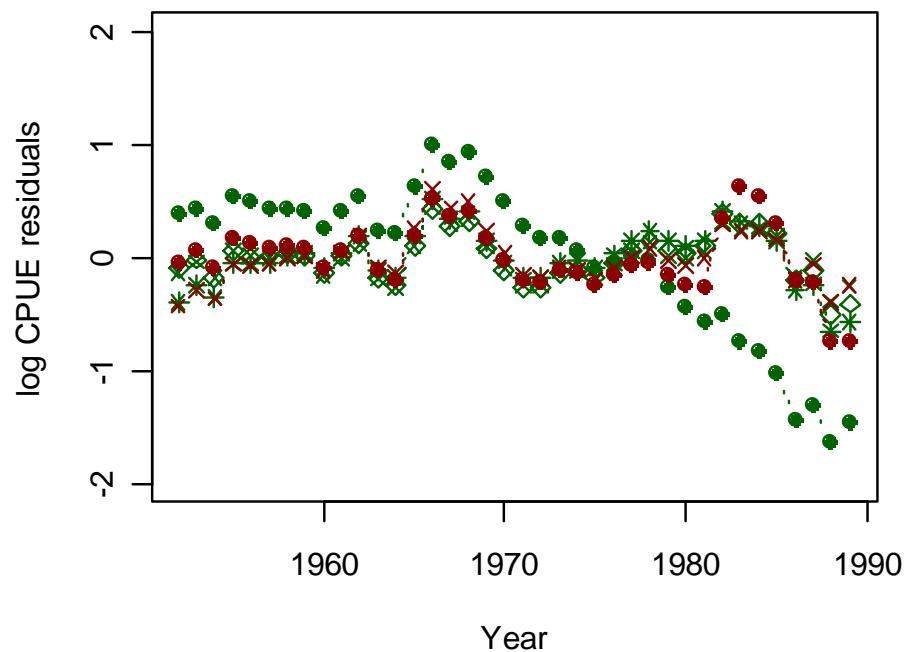
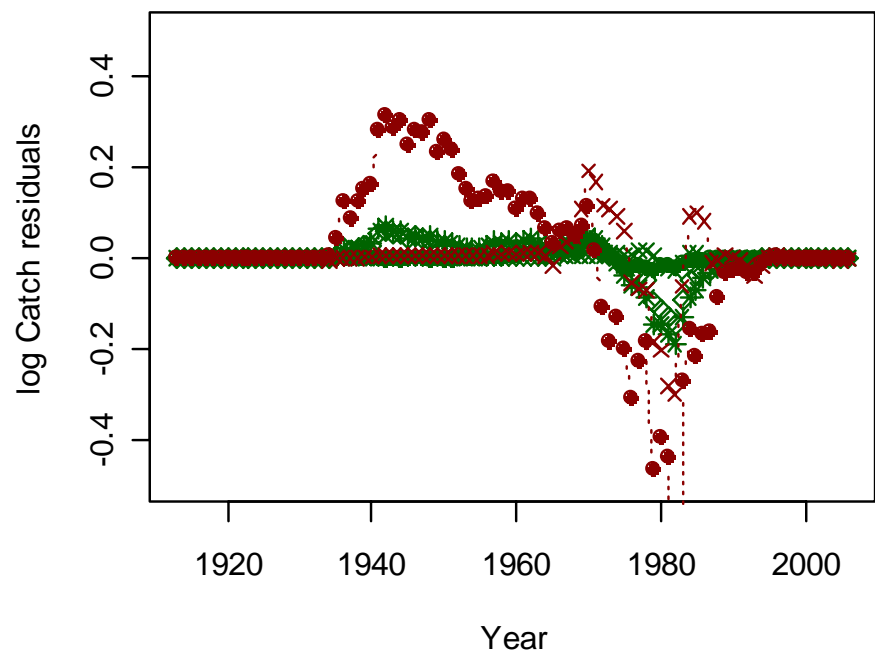
Current Assessment Model

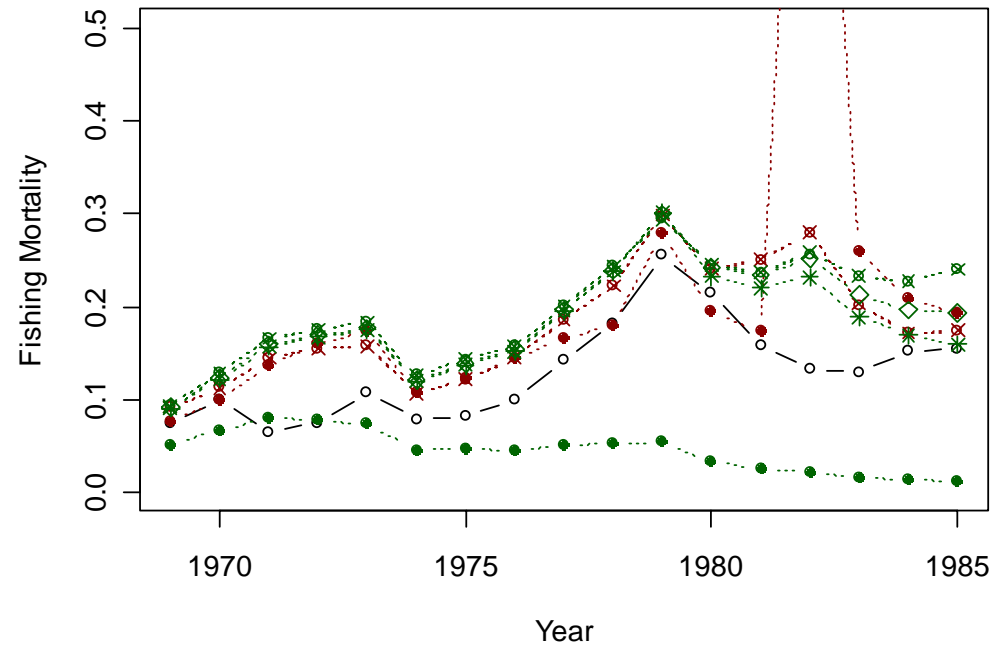
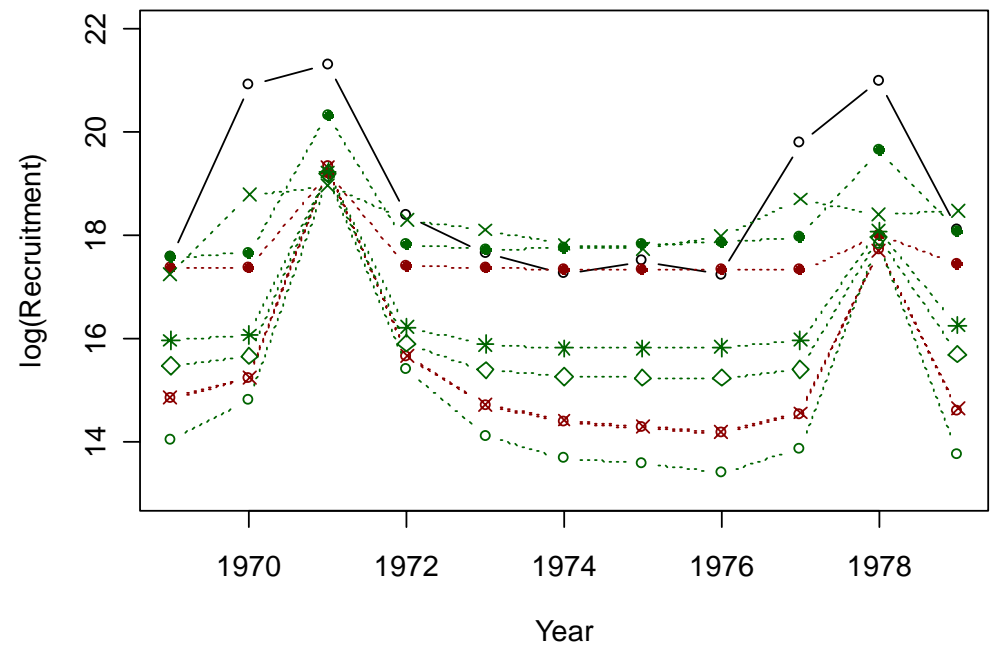
- At the 2005 GARM, the more-developed, STATCAM model was also fit to the redfish data
- Concern about some unreasonable recruitment estimates
- RED was chosen as recommended assessment model

GARM 2008

- For this meeting, fit RED and STATCAM to updated survey and landings data as well as older historical landings (1913-1933)
- The same emphasis/weighting factors with the longer landings time series gave unreasonable trends in SB estimates
- Also fit an alternative model (FSCTPD) to raw age measurements from landings and surveys for corroborative purposes







Recommended Model

- After exploration of different weighting schemes, residual patterns and comparison with FSCTPD model estimates (no retrospective analyses!) :
the recommended model is a STATCAM alternative described in Section N